

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 13, 2003, 04:28:29, Search time 3057.14 Seconds

(without alignments)
11440.147 Million cell updates/sec

Title: US-09-818-143-6

Perfect score: 1439

Sequence: 1 gagatcccttgaatca.....agaaaaaaaaaaaaa 1439

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 22781392 seqs, 12152238056 residues

1 number of hits satisfying chosen parameters: 45562784

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Database: Listing first 45 summaries

EST:
1: em_estsba:*
2: em_estsba:*
3: em_estsba:*
4: em_estsba:*
5: em_estsba:*
6: em_estsba:*
7: em_estsba:*
8: em_estsba:*
9: gb_estsba:*
10: gb_estsba:*
11: gb_estsba:*
12: gb_estsba:*
13: gb_estsba:*
14: gb_estsba:*
15: em_estsba:*
16: em_estsba:*
17: em_estsba:*
18: em_estsba:*
19: em_estsba:*
20: em_estsba:*
21: em_estsba:*
22: em_estsba:*
23: em_estsba:*
24: em_estsba:*
25: em_estsba:*
26: em_estsba:*
27: em_estsba:*
28: gb_estsba:*
29: gb_estsba:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1439	100.0	1439	10	AM888220 MKRA3 Hum
2	1292	88.8	2310	11	BC032745 Homo sapi
3	813.6	58.5	922	9	AL521507 AL521507
4	804.6	55.9	922	9	AL521506 AL521506

Result No.	Score	Query Match	Length	ID	Description
5	735.2	51.1	741	14	CA430710 UI-H-FH1-
6	706	49.1	738	10	BG748266 602706508
7	701.4	48.7	703	12	B0009860 UI-H-ED1-
8	698.8	48.5	703	12	BM980547 UI-CF-BN1
9	698.6	48.5	731	14	CB851585 UI-CF-BN1
10	693.6	48.2	1064	14	BX125388 UI-CF-BN1
11	687	47.7	703	10	BG678659 602624453
12	677.4	47.1	733	12	BM974268 UI-CF-EC1
13	655.2	44.1	674	14	CA440929 UI-H-ED0-
14	626.6	43.5	668	12	BM701957 UI-H-ED0-
15	624.8	43.4	673	13	BQ448042 UI-H-ED1-
16	624.8	43.4	683	13	BQ627928 UI-H-ED0-
17	607	42.2	760	12	BUI70946 AGENCOURT
18	603.6	41.9	664	12	BM95562 UI-H-DT1-
19	596	41.4	766	14	CD104758 AGENCOURT
20	590.4	41.0	636	12	BUT29623 UI-H-CQ1-
21	582.6	40.5	602	13	BUE63800 UI-CF-ENO
22	574.4	39.9	594	14	CB052399 NISC_9107
23	560.2	38.9	628	9	AA115295 2108612.x
24	555.6	38.6	574	14	CA777565 1p18a07.x
25	543.6	37.8	605	14	CA777311 1p18a07.x
26	541	37.6	587	12	CB306370 UI-H-CQ1-
27	537.6	37.4	571	12	BM710342 UI-H-CQ1-
28	537	37.3	571	12	BM90782 UI-H-CQ1-
29	534.6	37.2	542	12	BM019900 UI-H-ED0-
30	532	37.0	540	12	BM090553 UI-H-ED0-
31	527	36.6	535	9	AL049024 DKEP4340
32	526	36.6	538	10	BF724489 UI-H-CQ1-
33	525.8	36.5	642	12	BM671762 UI-H-CQ1-
34	522	36.3	566	13	BUE63307 UI-H-ED0-
35	517.4	36.0	530	9	AA625435 4f72607.x
36	507	35.2	508	14	CA851879 UI-H-ED0-
37	504	35.0	558	9	AI983849 w51e05.x
38	499.8	34.7	649	10	BH665809 601660828
39	496.6	34.5	570	10	AM63887 UI-H-ED0-
40	496.2	34.5	501	9	AA780019 2188905.8
41	494	34.3	621	14	W84522 2d90f10.81
42	483.2	33.6	516	9	AA873315 oh76h01.8
43	479.2	33.3	518	12	BM984490 UI-CF-DU1
44	476.6	33.1	501	9	AM069314 cr44b01.x
45	476	33.1	479	9	AI926527 w046a11.x

ALIGNMENTS

RESULT 1
LOCUS AM888220 1439 bp mRNA linear EST 05-MAR-2001
DEFINITION MKRA3 Human matrix cistern expression library Homo sapiens cDNA
clone incyte 1556751 similar to MKRA3 Matrix remodeling associated
gene 3, mRNA sequence.

ACCESSION AM888220
VERSION AM888220.1 GI:8050231

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 1439)

AUTHORS Walker, M.G. and Volkmuth, W.

TITLE Matrix-remodeling associated genes identified by co-expression

JOURNAL Unpublished

COMMENT Contact: Michael Walker

Incyte Genomics

3160 Porter Drive, Palo Alto, CA 94304, USA

Tel: 650 845-5771

Fax: 650 621 8514

Email: mwalker@incyte.com.

Location/Qualifiers

1. 1439

/organism="Homo sapiens"

/mol_type="mRNA"

Wed Aug 13 15:18:50 2003

us-09-818-143-6.rst

Page 2

```

/ob_xref="taxon:9606"
/clone_lib="Incyte 1556751"
/clone_lib="Human matrix c15aue expression library"
BASE COUNT      392 a      336 c      338 g      373 t
ORIGIN

```

```
Query Match      100.0%; Score 1439; DB 10; Length 1439;
Best Local Similarity 100.0%; Pred. No. 4e-208;
Matches 1439; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY	1	GAGTATCCCTGTTTATATCACTTTGSGTTAAAGAGACCTTGGATCATCTGCTCA	60
Db	1	GAGTATCCCTGTTTATATCACTTTGSGTTAAAGAGACCTTGGATCATCTGCTCA	60
QY	61	TTTCCTGAAGGTTTAGCCCTGCTCACTTTTCACTCTATTTCTTCTCTGTCAGAA	120
Db	61	TTTCCTGAAGGTTTAGCCCTGCTCACTTTTCACTCTATTTCTTCTCTGTCAGAA	120
QY	121	AGAGAGAAAAAGAGACAAATTACCAGAAACCCCTCCCTCCCAACATGGAGCCCTGG	180
Db	121	AGAGAGAAAAAGAGACAAATTACCAGAAACCCCTCCCTCCCAACATGGAGCCCTGG	180
QY	181	CAATGTTAATTTTCCTAGAAAATCCTTCAAGCTGAGACGACAGAAAAGATCTGGCT	240
Db	181	CAATGTTAATTTTCCTAGAAAATCCTTCAAGCTGAGACGACAGAAAAGATCTGGCT	240
QY	241	CTCAGGGTGCTCTTGCTGCTCCCGCGCAGAGCCCGCACTATAGTCAACAGGCCGCT	300
Db	241	CTCAGGGTGCTCTTGCTGCTCCCGCGCGCAAGCCCGCACTATAGTCAACAGGCCGCT	300
QY	301	GTTCTCTCCCGGGACCTCCAGAAATTTCTCTCTCAAGAGAAAAGAAAACAGGACCTG	360
Db	301	GTTCTCTCCCGGGACCTCCAGAAATTTCTCTCTCAAGAGAAAAGAAAACAGGACCTG	360
QY	361	GTTGGCAAAACGACAGGCGCGGCTCCCAAAACCCCAATGTGTATCGATTAAAGTTGGCC	420
Db	361	GTTGGCAAAACGACAGGCGCGGCTCCCAAAACCCCAATGTGTATCGATTAAAGTTGGCC	420
QY	421	GTCGCCAGGCGCTCCCAAGCCCAACTTAAGAGACAGGGCTTTGCTGAAAACCAAAATGG	480
Db	421	GTCGCCAGGCGCTCCCAAGCCCAACTTAAGAGACAGGGCTTTGCTGAAAACCAAAATGG	480
QY	481	GCCAGCTGGGCTTTTAAACAACCTTAGACCTTTCGGAAGCTTGCCTGCG	540
Db	481	GCCAGCTGGGCTTTTAAACAACCTTAGACCTTTCGGAAGCTTGCCTGCG	540
QY	541	GGAACGCGGCTTGCAGAGACATCAACAAGTTCTTCAATGGCTGTTGGACCCCTTA	600
Db	541	GGAACGCGGCTTGCAGAGACATCAACAAGTTCTTCAATGGCTGTTGGACCCCTTA	600
QY	601	GAAATCTCAATATATGCTTTCTTGTGTCCTTTTCTTGTGTAGCAACAGAAAGGAAAG	660
Db	601	GAAATCTCAATATATGCTTTCTTGTGTCCTTTTCTTGTGTAGCAACAGAAAGGAAAG	660
QY	661	GTTCCAGGCTCTTAAAAATGTGTCTTGTGTATCAGAGTGCCTGCTCAACAAATAACGCG	720
Db	661	GTTCCAGGCTCTTAAAAATGTGTCTTGTGTATCAGAGTGCCTGCTCAACAAATAACGCG	720
QY	721	GCTGCGCTTTGAGGCGCAGGTAGCTCAAGCCTCCAAAGCTTTAAAGCCATTCACAGAG	780
Db	721	GCTGCGCTTTGAGGCGCAGGTAGCTCAAGCCTCCAAAGCTTTAAAGCCATTCACAGAG	780
QY	781	AGAAAGCGCTGAGAGCTGCGAGGTTCAATTAAAGAGCAAGCACTGGTTCTCTCTTA	840
Db	781	AGAAAGCGCTGAGAGCTGCGAGGTTCAATTAAAGAGCAAGCACTGGTTCTCTCTTA	840
QY	841	GAAAGATGAGTTCCTTGCTTGATGTAGACATGCTCTTGATATTTTATGTAAAGGAAT	900
Db	841	GAAAGATGAGTTCCTTGCTTGATGTAGACATGCTCTTGATATTTTATGTAAAGGAAT	900
QY	901	GTAACGTAAACAAATAAGCGCTGGCGTGTCAAGAGACACAGACGATGTATGATGGA	960
Db	901	GTAACGTAAACAAATAAGCGCTGGCGTGTCAAGAGACACAGACGATGTATGATGGA	960

[illegible]

RESULT 2	LOCUS	DEFINITION	ACCSSION	VERSION	KEYWORDS	SOURCE	ORGANISM	REFERENCE	AUTHORS	TITLE	JOURNAL
BC032745	BC032745	2310 bp	mRNA	linear	HTC 04-MAR-2003		Homo sapiens (human)				
							Homo sapiens				
							Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.				
							1 (bases 1 to 2310)				
							Strausberg, R.				
							Direct Submision				
							Submitted (06-JUN-2002)				
							National Institutes of Health, Mammalian				

REMARK
COMMENT
NIH-MGC Project URL: <http://mgc.ncl.nih.gov>
Contact: MGC help desk

cDNA Library Preparation: Life Technologies, Inc.
 DNA Library Arrayed by: The I.M.A.G.E. Consortium (ILN)
 DNA Sequencing by: National Institutes of Health Intramural
 Sequencing Center (NISC),
 Galtherburg, Maryland.
 Web site: <http://www.nisc.nih.gov/>
 Contact: nisc.mcgmchrl.nih.gov
 Akher, N., Ayle, K., Beckstrom-Sternberg, S.M., Benjamin, B.,
 Blakesley, R.W., Bouffard, G.G., Bren, K., Brinkley, C., Brooks, S.,
 Bierlich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P.,
 Hansen, N., Ho, S.-L., Karlene, E., Kwong, P., Latief, P., Legaert, R.,
 Maduro, O.L., Mastello, C., Maskell, B., Mastrian, S.D., McCloskey, J.C.,
 McDowell, J., Pearson, R., Stancitrop, S., Thomas, P.J., Touchman, J.W.,
 Young, A.C., Vogt, J.L., Walker, M.A., Welch, K.D., Wiggins, L.,
 Young, A., Zhang, L.-H. and Green, E.D.

Clone distribution: MGC clone distribution information can be found

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 13, 2003, 05:31:01 / Search time 321.205 Seconds

(Without alignments)
10025.973 Million cell updates/sec

Title: US-09-818-143-6

Perfect score: 1439

Sequence: 1 ggcgtaccctcgttaccatca.....sgaaaaaaaaaaaaa 1439

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 1504479 seqs, 1118970152 residues

1 number of hits satisfying chosen parameters: 3008958

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Published Applications NA.*

1:	/cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq.*
2:	/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq.*
3:	/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq.*
4:	/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq.*
5:	/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq.*
6:	/cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq.*
7:	/cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq.*
8:	/cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq.*
9:	/cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq.*
10:	/cgn2_6/ptodata/2/pubpna/US09B_PUBCOMB.seq.*
11:	/cgn2_6/ptodata/2/pubpna/US09C_PUBCOMB.seq.*
12:	/cgn2_6/ptodata/2/pubpna/US09A_PUBCOMB.seq.*
13:	/cgn2_6/ptodata/2/pubpna/US10_PUBCOMB.seq.*
14:	/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq.*
15:	/cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq.*
16:	/cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq.*
17:	/cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1439	100.0	1439	9	US-09-818-143-6
2	1439	100.0	1439	10	US-09-974-298-448
3	1257.6	87.4	1324	14	US-10-125-237-4
4	1257.6	87.4	1324	14	US-10-105-891-4
5	629.8	43.8	633	10	US-09-864-864-159
6	562	39.1	562	14	US-10-106-698-427
7	405.8	28.2	495	11	US-09-918-995-12094
8	386.4	26.8	565	10	US-09-833-381-1144
9	386.4	26.8	565	11	US-09-822-846-10
10	355.4	24.7	396	11	US-09-918-995-1821
11	300.4	20.9	309	10	US-09-954-456-1950
12	242.2	16.8	268	10	US-09-833-381-1143
13	188.6	13.1	303	10	US-09-783-590-1803
14	180.2	12.5	297	10	US-09-783-590-1935
15	129.8	9.0	517	10	US-09-833-381-1145
16	118	8.2	196	10	US-09-783-590-4264

ALIGNMENTS

17	50.4	3.5	487	13	US-10-027-632-77534	Sequence 77534, A
18	49.4	3.4	40267	11	US-09-978-244A-25	Sequence 25, Appl
19	48.2	3.3	1503841	9	US-09-795-668-1	Sequence 1, Appl
20	48.2	3.3	1503841	9	US-09-795-668-1	Sequence 1, Appl
21	48.2	3.3	1503841	10	US-09-946-807-1	Sequence 379, App
22	48	3.3	32189	9	US-09-764-878-379	Sequence 379, App
23	48	3.3	32189	14	US-10-079-854-379	Sequence 379, App
24	48	3.3	32221	9	US-09-764-878-377	Sequence 377, App
25	48	3.3	32221	14	US-10-079-854-377	Sequence 377, App
26	47.8	3.3	518	13	US-10-027-632-14745	Sequence 14745, A
27	47.8	3.3	518	13	US-10-027-632-14745	Sequence 14745, A
28	47.8	3.3	518	13	US-10-027-632-14746	Sequence 14746, A
29	47.8	3.3	518	13	US-10-027-632-14747	Sequence 14747, A
30	47.6	3.3	7597	12	US-10-017-161-1657	Sequence 1657, App
31	47.6	3.3	32846	12	US-10-017-161-1657	Sequence 1657, App
32	47.2	3.3	483	13	US-10-027-632-40348	Sequence 40348, A
33	47	3.3	11832	9	US-09-037-657-38	Sequence 38, Appl
34	47	3.3	30175	9	US-09-738-878-3	Sequence 3, Appl
35	47	3.3	30175	13	US-10-027-632-273001	Sequence 273001, Appl
36	46.8	3.3	68	11	US-09-852-903C-17	Sequence 17, Appl
37	46.2	3.2	591	13	US-10-027-632-24348	Sequence 24348, A
38	46.2	3.2	725	13	US-09-969-708-464	Sequence 1664, App
39	46.2	3.2	3768	10	US-09-954-531-164	Sequence 373, App
40	46	3.2	3768	10	US-09-954-531-373	Sequence 689, App
41	46	3.2	3768	12	US-09-873-319-689	Sequence 1041, Ap
42	46	3.2	3768	12	US-09-960-706-1041	Sequence 3, Appl
43	46	3.2	3768	12	US-09-960-706-1041	Sequence 3, Appl
44	46	3.2	3768	12	US-09-960-706-1041	Sequence 3, Appl
45	46	3.2	32816	9	US-09-729-094-3	Sequence 3, Appl

RESULT 1
US-09-818-143-6
Sequence 6, Application US/09818143
Patent No. US20020019000A1
GENERAL INFORMATION:
APPLICANT: Walker, Michael G.
APPLICANT: Volkman, Wayne
APPLICANT: Klingler, Tod M.
TITLE OF INVENTION: POLYNUCLEOTIDES COEXPRESSED WITH MATRIX-REMODELING GENES
FILE REFERENCE: PB-0004 CIP
CURRENT APPLICATION NUMBER: US/09/818.143
CURRENT FILING DATE: 2001-03-26
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PERL Program
SEQ ID NO 6
LENGTH: 1439
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: 1556751CBI
US-09-818-143-6

Query Match	100.0%	Score 1439	DB 9	Length 1439
Best Local Similarity	100.0%	Pred. No. 0		
Matches 1439	Conservative 0	Mismatches 0	Indels 0	Gaps 0
QY	1	GAATACCTGTTATTCATCTTTGTGTTAAAGACACTTGGTCTGCTTCA	60	
DB	1	GAATACCTGTTATTCATCTTTGTGTTAAAGACACTTGGTCTGCTTCA	60	
QY	61	TTCTTGAAGATTACCTGCTGCTTCTTCTTCTTCTTCTTCTTCTTCA	120	
DB	61	TTCTTGAAGATTACCTGCTGCTTCTTCTTCTTCTTCTTCTTCTTCA	120	
QY	121	AG	180	
DB	121	AG	180	
QY	181	CAATGTTATTTCTTCAAGAAATCTTCAAGCTGAAGAGAGAGAGAGAG	240	

Wed Aug 13 15:18:50 2003

us-09-818-143-6.rnpb

Page 2

Db 181 CAAAGTAAATTTCTAGAGAAATCTTCAAGCTGAAAGCGGAAAGAAATGTGCT 240
Qy 241 CTCAGGAGTGTCTGAGCTCCCGCGCGAGAGCCCAAGATGTCACAGGCGCTCT 300
Db 241 CTCAGGAGTGTCTGAGCTCCCGCGCGAGAGCCCAAGATGTCACAGGCGCTCT 300
Qy 301 GTTCTCCCGGAGCTTCCAGATTTCTCTCTCAAGAGAAAGAAACAGGCGATCGCT 360
Db 301 GTTCTCCCGGAGCTTCCAGATTTCTCTCTCAAGAGAAAGAAACAGGCGATCGCT 360
Qy 361 GTTGGCAAAACGAGAGGCGGCTCCCAAAACCCCATGTGTGATGATTAAGTTGGCC 420
Db 361 GTTGGCAAAACGAGAGGCGGCTCCCAAAACCCCATGTGTGATGATTAAGTTGGCC 420
Qy 421 GTCCCAAGGCTCCAGCGCAACTTAAGAGAGAGGCTTGGTAAACCAAAATGG 480
Db 421 GTCCCAAGGCTCCAGCGCAACTTAAGAGAGAGGCTTGGTAAACCAAAATGG 480
Qy 481 GCCAGTGGGCTTTTAAAGACTTGAAGACTTTCGGAGCTGTAAGAGAGCTGGC 540
Db 481 GCCAGTGGGCTTTTAAAGACTTGAAGACTTTCGGAGCTGTAAGAGAGCTGGC 540
Qy 541 GAAACGGGCTTCCAGAGACACTCAAGTTCTCTCAATGGCTGTTTGGTCCCTTA 600
Db 541 GAAACGGGCTTCCAGAGACACTCAAGTTCTCTCAATGGCTGTTTGGTCCCTTA 600
Qy 601 GAATCTCAATCATGCTTCTTGTGAGCTTTTCTTGTGAGAGACAGAGAGGAGG 660
Db 601 GAATCTCAATCATGCTTCTTGTGAGCTTTTCTTGTGAGAGACAGAGAGGAGG 660
Qy 661 GTTCCAAAGCTCTAAAGATGCTTGTGATCAGAGTCCGCTCCAAACCAATATGCGC 720
Db 661 GTTCCAAAGCTCTAAAGATGCTTGTGATCAGAGTCCGCTCCAAACCAATATGCGC 720
Qy 721 GCTGCCCTTTCAGGCGAGTGTGAGCTCAGCTCCAGGCTTAAAGCCATTTCAAG 780
Db 721 GCTGCCCTTTCAGGCGAGTGTGAGCTCAGCTCCAGGCTTAAAGCCATTTCAAG 780
Qy 781 AGAAGCGCTGAGAGCTGAGGCTTCTTAAAGAGCAAGCACTGCTTCTCTTA 840
Db 781 AGAAGCGCTGAGAGCTGAGGCTTCTTAAAGAGCAAGCACTGCTTCTCTTA 840
Qy 841 GAAAGTAGTCTTGTGCTGATGATGAGCTGGCTTGTGATTTTGAAGGAAAT 900
Db 841 GAAAGTAGTCTTGTGCTGATGATGAGCTGGCTTGTGATTTTGAAGGAAAT 900
Qy 901 GTACGTAAACAAATAGGCTTGTGCTGATGATGAGCAAGCAAGTGTGATGAG 960
Db 901 GTACGTAAACAAATAGGCTTGTGCTGATGATGAGCAAGCAAGTGTGATGAG 960
Qy 961 TGAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1020
Db 961 TGAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1020
Qy 1021 ACAAACCAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1080
Db 1021 ACAAACCAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1080
Qy 1081 TTTGGGAGCTTTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1140
Db 1081 TTTGGGAGCTTTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1140
Qy 1141 AGCCAGTGCATTTTAAAGCTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1200
Db 1141 AGCCAGTGCATTTTAAAGCTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1200
Qy 1201 CTGAGATGAGTGCAGAGATCTCTCACTCTCTCTCTCTCTCTCTCTCTCTCT 1260
Db 1201 CTGAGATGAGTGCAGAGATCTCTCACTCTCTCTCTCTCTCTCTCTCTCTCT 1260
Qy 1261 CCGTGGGCGCATTTCTTCAAGCATATCATGAGCTTAAATTTCACTTCTGATCAG 1320

Db 1261 CCTGCGCCGCAATCTCTCTCTCAAGCATATCATGAGCTTAAATTTCACTTCTGATCAG 1320
Qy 1321 GGTAGTGCATTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1380
Db 1321 GGTAGTGCATTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1380
Qy 1381 TTTAGAGTAAACAAATTTTAAAGTACCATTAATGAGAGAGAGAGAGAGAGAG 1439
Db 1381 TTTAGAGTAAACAAATTTTAAAGTACCATTAATGAGAGAGAGAGAGAGAGAG 1439

RESULT 2
US-09-974-298-148
Sequence 148, Application US/09974298
Patent No. US20020156263A1
GENERAL INFORMATION:
APPLICANT: Chem. Hucl-Mel
TITLE OF INVENTION: GENES EXPRESSED IN BREAST CANCER
FILE REFERENCE: PA-0037 P
CURRENT APPLICATION NUMBER: US/09/974,298
PRIOR FILING DATE: 2001-10-04
PRIOR APPLICATION NUMBER: 60/238,331
NUMBER OF SEQ ID NOS: 194
SOFTWARE: PERL Program
SEQ ID NO: 148
LENGTH: 1439
TYPE: DNA
ORGANISM: Homo sapiens
FEATURES:
NAME/KEY: misc feature
OTHER INFORMATION: Inocyte ID No. US20020156263A1 1556751CB1
US-09-974-298-148

Query Match 100.0%; Score 1439; DB 10; Length 1439;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1439; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GAGTATCCCTGTTTAAATCACTTTTGTGTTTAAAGAGAGAGAGAGAGAGAGAGAGAGAG 60
Db 1 GAGTATCCCTGTTTAAATCACTTTTGTGTTTAAAGAGAGAGAGAGAGAGAGAGAGAGAG 60
Qy 61 TTTCTTGAAGAGTATGAGCTGCTGCTCACTTCACTTATTTCTTCTGTGTCAAGAA 120
Db 61 TTTCTTGAAGAGTATGAGCTGCTGCTCACTTCACTTATTTCTTCTGTGTCAAGAA 120
Qy 121 AGAAG 180
Db 121 AGAAG 180
Qy 181 CAAAGTAAATTTCTTGAAG 240
Db 181 CAAAGTAAATTTCTTGAAG 240
Qy 241 CTCAGGAGTGTCTGAGCTCCCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 300
Db 241 CTCAGGAGTGTCTGAGCTCCCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 300
Qy 301 GTTCTCCCGGAGCTCCAGAGATTTCTCTCTCAAGAGAGAGAGAGAGAGAGAGAGAGAG 360
Db 301 GTTCTCCCGGAGCTCCAGAGATTTCTCTCTCAAGAGAGAGAGAGAGAGAGAGAGAGAG 360
Qy 361 GTTGGCAAAACGAGAGGCGGCTCCCAAAACCCCATGTGTGATGATTAAGTTGGCC 420
Db 361 GTTGGCAAAACGAGAGGCGGCTCCCAAAACCCCATGTGTGATGATTAAGTTGGCC 420
Qy 421 GTCCCAAGGCTCCAGCGCAACTTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 480
Db 421 GTCCCAAGGCTCCAGCGCAACTTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 480
Qy 481 GCCAGTGGGCTTTTAAAGACTTGAAGACTTTCGGAGCTGTAAGAGAGAGCTGGC 540
Db 481 GCCAGTGGGCTTTTAAAGACTTGAAGACTTTCGGAGCTGTAAGAGAGAGCTGGC 540

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run On: August 13, 2003, 03:56:05 / Search time 86.2666 Seconds
(without alignments)
7362.646 Million cell updates/sec

Title: US-09-818-143-6

Perfect score: 1439
Sequence: 1 gsgatccctcgttcaica.....sgaaaaaaaaaaaaa 1439

Scoring table: IDENTITY_NUC
Gapop 10.0, Gapext 1.0

Searched: 56978 seqs, 22069166 residues

1 number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database:

Issued Patents NA:
1: /cgn2_6/ptodata/2/1na/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/1na/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/1na/5R_COMB.seq:*
4: /cgn2_6/ptodata/2/1na/6A_COMB.seq:*
5: /cgn2_6/ptodata/2/1na/6B_COMB.seq:*
6: /cgn2_6/ptodata/2/1na/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1264	87.8	4772	4 US-09-484-970B-133	Sequence 133, App
2	60.6	4.2	7218	1 US-08-332-463-14	Sequence 14, App1
3	45.4	3.2	374	2 US-08-332-766A-35	Sequence 35, App1
4	44.4	3.1	152331	3 US-09-128-155-16	Sequence 16, App1
5	44.4	3.1	176373	3 US-09-128-155-17	Sequence 17, App1
6	44.2	3.1	1315	4 US-09-721-822A-10	Sequence 10, App1
7	43.8	3.0	367	2 US-08-332-766A-9	Sequence 9, App1
8	43.6	3.0	857	1 US-08-460-040-1	Sequence 1, App1
9	43.6	3.0	1172	1 US-07-945-288-9	Sequence 9, App1
10	43.6	3.0	1172	1 US-08-462-831-9	Sequence 9, App1
11	43.6	3.0	1172	1 US-08-461-809-9	Sequence 9, App1
12	43.6	3.0	1172	1 US-08-461-441-9	Sequence 9, App1
13	43.6	3.0	1172	5 US-08-332-463-14	Sequence 14, App1
14	43.4	3.0	7218	1 US-09-056-226-1	Sequence 1, App1
15	43	3.0	3207	1 US-07-946-497-1	Sequence 1, App1
16	42.6	3.0	3207	1 US-08-483-322-1	Sequence 1, App1
17	42.6	3.0	3207	2 US-08-478-882-1	Sequence 1, App1
18	42.6	3.0	3207	2 US-08-478-882-1	Sequence 1, App1
19	42	2.9	11588	5 PCT-US93-06251-23	Sequence 23, App1
20	41.8	2.9	16389	4 US-09-741-154-3	Sequence 3, App1
21	40.6	2.8	2089	4 US-09-369-247-19	Sequence 19, App1
22	40	2.8	32654	4 US-09-801-191A-1	Sequence 3, App1
23	39.6	2.8	450	3 US-09-885-983-15	Sequence 15, App
24	39.6	2.8	3347	4 US-09-702-705-318	Sequence 318, App
25	39.6	2.8	3347	4 US-09-736-457-318	Sequence 318, App
26	39.2	2.7	957	4 US-09-328-475C-12	Sequence 12, App1
27	39.2	2.7	1091	4 US-09-328-965-1	Sequence 1, App1

28	39.2	2.7	1474	3 US-08-821-994-64	Sequence 64, App1
29	39.2	2.7	1493	6 5340934-5	Patent No. 5340934
30	39.2	2.7	3650	3 US-08-329-799-34	Sequence 34, App1
31	38.8	2.7	855	3 US-08-906-769-130	Sequence 130, App
32	38.8	2.7	855	3 US-08-906-616-130	Sequence 130, App
33	38.8	2.7	855	3 US-08-639-075A-130	Sequence 130, App
34	38.8	2.7	855	3 US-09-012-431-130	Sequence 130, App
35	38.8	2.7	855	3 US-09-012-431-130	Sequence 130, App
36	38.8	2.7	855	3 US-08-906-613-130	Sequence 130, App
37	38.8	2.7	1190	4 US-09-380-207-1	Sequence 1, App1
38	38.8	2.7	19124	2 US-08-487-826B-13	Sequence 13, App1
39	38.6	2.7	7859	1 US-07-854-595B-4	Sequence 4, App1
40	38.6	2.7	7859	1 US-08-450-505B-15	Sequence 15, App1
41	38.6	2.7	7859	3 US-07-982-759F-15	Sequence 15, App1
42	38.4	2.7	1378	4 US-09-149-476-208	Sequence 208, App
43	38.4	2.7	2323	4 US-09-149-476-24	Sequence 24, App1
44	38.4	2.7	4072	3 US-09-272-496-7	Sequence 7, App1
45	38.2	2.7	711	3 US-08-998-416-786	Sequence 786, App

ALIGNMENTS

RESULT 1
US-09-484-970B-133
Sequence 133, Application US/09484970B
Patent No. 6426186
GENERAL INFORMATION:
APPLICANT: Jones, Karen A.
APPLICANT: Volkmuth, Wayne
TITLE OF INVENTION: BONE REMODELING GENES
FILE REFERENCE: PB-0014 US
CURRENT APPLICATION NUMBER: US/09/484,970B
CURRENT FILING DATE: 2000-01-18
NUMBER OF SEQ ID NOS: 172
SOFTWARE: PERL Program
SEQ ID NO 133
LENGTH: 4772
TYPE: DNA
ORGANISM: Homo sapiens
FEATURES:
NAME/KEY: misc_feature
OTHER INFORMATION: Inocyte ID No. 6426186 245487.3CB1
NAME/KEY: unsure
LOCATION: 3196-3488
OTHER INFORMATION: a, c, g, or other
US-09-484-970B-133

Query Match 87.8%, Score 1264, DB 4, Length 4772,
Best Local Similarity 99.5%, Pred. No. 0,
Matches 1278, Conservative 0, Mismatches 5, Indels 1, Gaps 1,

QY	144	CCGAGAAACCCCTCTCCCAATGAGAGGCTTGCAATGTTATTTCTAGAAA	203
DB	3489	CCGAGAAACCCCTCTCCCAATGAGAGGCTTGCAATGTTATTTCTAGAAA	3548
QY	204	TCTTCAGACCTGAAAGAGGAGAAATGCTGCTGAGGCTTTCCTGCTCC	263
DB	3549	TCTTCAGACCTGAAAGAGGAGAAATGCTGCTGAGGCTTTCCTGCTCC	3608
QY	264	GGCGGAGGCGGCGAGTATGTCACAGGCGGCTTCTCTCCCGGAGCTCCAGAT	323
DB	3609	GGCGGAGGCGGCGAGTATGTCACAGGCGGCTTCTCTCCCGGAGCTCCAGAT	3668
QY	324	TTCCTCTCTCAAGAAAGAAACAGGAGCATCGCTTGTGGCAAAACGAGGCGGCT	383
DB	3669	TTCCTCTCTCAAGAAAGAAACAGGAGCATCGCTTGTGGCAAAACGAGGCGGCT	3728
QY	384	CCGAAACCCCAATGCTGATGATTAAGTTGGCGGCTCCCAAGGCTCCAGGCAAA	443
DB	3729	CCGAAACCCCAATGCTGATGATTAAGTTGGCGGCTCCCAAGGCTCCAGGCAAA	3788

BA (INCY-) INCYTE PHARM INC.

XX Walker MG, Volkmutz W, Klingler TM,

XX WPI; 2000-317934/27.

DR P-PSDB; AAY70744.

XX Protein co-expressed with matrix-remodeling proteins, useful in the
PT diagnosis and treatment of cancer, cardiomyopathy, arthritis,
PT angiogenesis, diabetic necrosis, atherosclerosis, fibrosis, and
XX ulceration.

PS Claim 1; Page 40-41; 55pp; English.

XX The present sequence is NSEQ gene that is co-expressed with one or more
CC known matrix-remodeling genes in a number of biological samples using an
CC expression vector. This sequence was identified from the
CC Incyte clone 1556751. The gene, protein, and antibody sequences can be
used in the diagnosis, and treatment or prevention of a disease
associated with its altered expression. The diseases that can be treated
are matrix-remodeling diseases, including cancer, cardiomyopathy,
arthritis, angiogenesis, diabetic necrosis, atherosclerosis, fibrosis,
CC and ulceration.

CC Sequence 1439 BP; 392 A; 336 C; 338 G; 373 T; 0 other;

Query Match 100.0%; Score 1439; DB 21; Length 1439;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 1439; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	GAGTATCCCTTGTATTAACCTTTTGTGTTAAAGACCTTTGGTCACTGCTCA	60
DB	1	GATATACCTTGTATTAACCTTTTGTGTTAAAGACCTTTGGTCACTGCTCA	60
QY	61	TTCTTTGAAGAGTTTGGCTGCTCACTTTTCACTCTATTTCTTCTCTGCTCAAGA	120
DB	61	TTCTTTGAAGAGTTTGGCTGCTGCTCACTTTTCACTCTATTTCTTCTCTGCTCAAGA	120
QY	121	AGAAAGAAAAAGACAAATTTACCGAAGAACCCCTCCCTCCCAATGAGAGCTTTGG	180
DB	121	AGAAAGAAAAAGACAAATTTACCGAAGAACCCCTCCCTCCCAATGAGAGCTTTGG	180
QY	181	CAATGTTAATTTCTTGAAGAAATCTTCAAGACTGGAAGACGAGAGAAAGATCGCT	240
DB	181	CAATGTTAATTTCTTGAAGAAATCTTCAAGACTGGAAGACGAGAGAAAGATCGCT	240
QY	241	CTCAGGGTGGCTTCTGCGTCCCGCGCCGAGCCCACTATGTCAGAGGGCCCTCT	300
DB	241	CTCAGGGTGGCTTCTGCGTCCCGCGCCGAGCCCACTATGTCAGAGGGCCCTCT	300
QY	301	GTTTCCTCCCGGAGCTCAAAATTTCTTCTCAAGAGAAAGAAACAGGGCATGCGCTT	360
DB	301	GTTTCCTCCCGGAGCTCAAAATTTCTTCTCAAGAGAAAGAAACAGGGCATGCGCTT	360
QY	361	GTTTGCAGAAACGAGGCGCGCTCCGAAAGAACCCCATGTGTACATTTAAAGTTGGCC	420
DB	361	GTTTGCAGAAACGAGGCGCGCTCCGAAAGAACCCCATGTGTACATTTAAAGTTGGCC	420
QY	421	GTTCCCGAGGCTCCCGAGGCAACTTAAGAGACAGGGCTTGTGAAAAACCAACATGG	480
DB	421	GTTCCCGAGGCTCCCGAGGCAACTTAAGAGACAGGGCTTGTGAAAAACCAACATGG	480
QY	481	GCCAGCTGGGCTTTTAAACCTTGAAGACTTTCGAGTGCCTGGAACAGAGCTCGG	540
DB	481	GCCAGCTGGGCTTTTAAACCTTGAAGACTTTCGAGTGCCTGGAACAGAGCTCGG	540
QY	541	GGAAACGCGGCTTCCAGAGACACTCAAGTTTCTTCAATGAGCTGTTTGGTCCCTAA	600
DB	541	GGAAACGCGGCTTCCAGAGACACTCAAGTTTCTTCAATGAGCTGTTTGGTCCCTAA	600
QY	601	GAATTCACATATGCTTCTTGTGCTTTCTTGTGAGCAACGAAAGGAAAGG	660
DB	601	GAATTCACATATGCTTCTTGTGCTTTCTTGTGAGCAACGAAAGGAAAGG	660

QY	661	GTTCCAGGCTCTAAAGAAATGTCCTTGTGATGACAGATGTCCTCAACCAATAGGCC	720
DB	661	GTTCCAGGCTCTTAAGAAATGTCCTTGTGATGACAGATGTCCTCAACCAATAGGCC	720
QY	721	GCTGCTTTTCAAGGCGCAATGAGTCAAGCTTCAAGGCTTTTAAAGCAATTTACAGAG	780
DB	721	GCTGCTTTTCAAGGCGCAATGAGTCAAGCTTCAAGGCTTTTAAAGCAATTTACAGAG	780
QY	781	AGAAAGGCTGAGAGCTGCAAGGTTCAATTAAGAGCAAGCACTGGTTCTCTCTTA	840
DB	781	AGAAAGGCTGAGAGCTGCAAGGTTCAATTAAGAGCAAGCACTGGTTCTCTCTTA	840
QY	841	GAAGAGGCTGAGAGCTGCAAGGTTCAATTAAGAGCAAGCACTGGTTCTCTCTTA	900
DB	841	GAAGAGGCTGAGAGCTGCAAGGTTCAATTAAGAGCAAGCACTGGTTCTCTCTTA	900
QY	901	GTAAGTAAACAAATAGAGGCTTGGCTGCTCAAGAGACAGAGATGATGATGGA	960
DB	901	GTAAGTAAACAAATAGAGGCTTGGCTGCTCAAGAGACAGAGATGATGATGGA	960
QY	961	TGAGTGAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT	1020
DB	961	TGAGTGAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT	1020
QY	1021	ACAAACCAAGCTGATGGAACCAATTAATGAGGCTGTCAGAGGAGAGGCTGAGC	1080
DB	1021	ACAAACCAAGCTGATGGAACCAATTAATGAGGCTGTCAGAGGAGAGGCTGAGC	1080
QY	1081	TTTGGGCACTTTGAGAGGCGGTACAAGAGTTCTGTGCTGTGTGCTGAGGAGG	1140
DB	1081	TTTGGGCACTTTGAGAGGCGGTACAAGAGTTCTGTGCTGTGTGCTGAGGAGG	1140
QY	1141	AGCAGTGAATTTAATTTAAGCTTGAAGCAATCTTGTGCGGAGAGATGAGTCC	1200
DB	1141	AGCAGTGAATTTAATTTAAGCTTGAAGCAATCTTGTGCGGAGAGATGAGTCC	1200
QY	1201	CTGAGTGGTCAAGGATCTTCTCAACTTCTTCTCGTGGAGTACTGACTCTG	1260
DB	1201	CTGAGTGGTCAAGGATCTTCTCAACTTCTTCTCGTGGAGTACTGACTCTG	1260
QY	1261	CCTGCGGCGCAATCTCTCTCAAGCATATCCAGAGCTTAAATTCATCTGATAC	1320
DB	1261	CCTGCGGCGCAATCTCTCTCAAGCATATCCAGAGCTTAAATTCATCTGATAC	1320
QY	1321	GATAGCTCAATTAAGCAATTTAATTAAGCTTAAATTAAGCTTAAATTAAGCTT	1380
DB	1321	GATAGCTCAATTAAGCAATTTAATTAAGCTTAAATTAAGCTTAAATTAAGCTT	1380
QY	1381	TTTAAAGGTTAAACAAATTTAATTAAGCTTAAATTAAGCTTAAATTAAGCTT	1439
DB	1381	TTTAAAGGTTAAACAAATTTAATTAAGCTTAAATTAAGCTTAAATTAAGCTT	1439

RESULT 2
AAL42450
ID AAL42450 standard; DNA; 1439 BP.
XX AAL42450;
XX 11-JUL-2002 (first entry)
XX Human matrix-remodeling-associated nucleotide 6.
XX Human; de; matrix-remodeling gene; extracellular matrix; gene;
XX matrix-remodeling-associated nucleotide; screening;
XX matrix remodeling-associated disease; angiogenesis; arthritis;
XX atherosclerosis; cancer; cardiomyopathy; diabetic necrosis; fibrosis;
XX Homo sapiens.
XX Key Location/Qualifiers
XX

CDS 168..467
 FT /*tag= a
 PT /product= "Human matrix-remodeling-associated protein 2"
 XX
 XX US2002019000-A1.
 XX
 XX 14-FEB-2002.
 XX
 XX 26-MAR-2001; 2001US-0818143.
 XX
 XX 09-OCT-1993; 98US-0169289.
 XX
 XX (WALKER M G.
 PA (VOLK M W.
 PA (KLINGLER T M.
 XX
 XX Walker MG, Volkmuch W, Klingler TM,
 XX
 XX WPI; 2002-338319/37.
 XX P-PSDB; AAO14785.
 XX
 XX New isolated polynucleotide coexpressed with matrix-remodeling genes,
 PT useful in diagnosis, prognosis, prevention and treatment of diseases
 PT associated with matrix-remodeling such as angiogenesis, arthritis and
 PT cancer
 XX
 XX Claim 1, Page 21, 63pp; English.
 XX
 XX The invention comprises human nucleotide sequences which are co-expressed
 CC with matrix-remodeling genes. Matrix-remodeling is associated with the
 CC construction, destruction and reorganization of extracellular matrix
 CC components. The matrix-remodeling-associated nucleotides of the invention
 CC are useful for screening for and purifying ligands that specifically bind
 CC to the nucleotides of the invention. The matrix-remodeling-associated
 CC nucleotides of the invention are also useful in the diagnosis, prognosis,
 CC prevention, treatment and evaluation of therapies for diseases associated
 CC with matrix remodeling (e.g. angiogenesis, arthritis, atherosclerosis,
 CC cancer, cardiomyopathy, diabetic necrosis, fibrosis and ulceration). The
 CC present DNA sequence represents a human matrix-remodeling-associated
 CC nucleotide of the invention.
 XX
 XX Sequence 1439 BP; 392 A; 336 C; 338 G; 373 T; 0 other;
 SQ
 Query Match 100.0%; Score 1439; DB 24; Length 1439;
 Best Local Similarity 100.0%; Pred No. 0;
 Matches 1439; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 1 GAGTATCCCTGTTTAACTCTTTGTGTAAAGAGACCTTTGGTCACTCTCA 60
 1 GAGTATCCCTGTTTAACTCTTTGTGTAAAGAGACCTTTGGTCACTCTCA 60
 61 TTCTTGAAGAGTTAGCCCTGCTCACTTTCACTTATTTCTCCGCTCAAGAA 120
 61 TTCTTGAAGAGTTAGCCCTGCTCACTTTCACTTATTTCTCCGCTCAAGAA 120
 61 TTCTTGAAGAGTTAGCCCTGCTCACTTTCACTTATTTCTCCGCTCAAGAA 120
 121 AAGAGAAAAAGAGCAATTACCAAGAAACCTCTTCCCACTAGAGGCTTGG 180
 121 AAGAGAAAAAGAGCAATTACCAAGAAACCTCTTCCCACTAGAGGCTTGG 180
 121 AAGAGAAAAAGAGCAATTACCAAGAAACCTCTTCCCACTAGAGGCTTGG 180
 121 AAGAGAAAAAGAGCAATTACCAAGAAACCTCTTCCCACTAGAGGCTTGG 180
 181 CAAATGTTAATTTCTAGAAATCTTCAAGCTGAAGAGAGAGAAATCTGCT 240
 181 CAAATGTTAATTTCTAGAAATCTTCAAGCTGAAGAGAGAGAAATCTGCT 240
 181 CAAATGTTAATTTCTAGAAATCTTCAAGCTGAAGAGAGAGAAATCTGCT 240
 181 CAAATGTTAATTTCTAGAAATCTTCAAGCTGAAGAGAGAGAAATCTGCT 240
 241 CTCAGAGTGTCTGCTGCTCCGCGCGAGGCGCCAGATGTCACAGGCGCTCT 300
 241 CTCAGAGTGTCTGCTGCTCCGCGCGAGGCGCCAGATGTCACAGGCGCTCT 300
 241 CTCAGAGTGTCTGCTGCTCCGCGCGAGGCGCCAGATGTCACAGGCGCTCT 300
 241 CTCAGAGTGTCTGCTGCTCCGCGCGAGGCGCCAGATGTCACAGGCGCTCT 300
 301 GTTCTCTCCCGGAGCTCAGAAATTTCTCTCTCAAGAGAGAGAAACAGGGCAGTCTT 360
 301 GTTCTCTCCCGGAGCTCAGAAATTTCTCTCTCAAGAGAGAGAAACAGGGCAGTCTT 360
 301 GTTCTCTCCCGGAGCTCAGAAATTTCTCTCTCAAGAGAGAGAAACAGGGCAGTCTT 360
 301 GTTCTCTCCCGGAGCTCAGAAATTTCTCTCTCAAGAGAGAGAAACAGGGCAGTCTT 360
 361 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 420
 361 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 420

Db 361 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 420
 Qy 421 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 480
 Db 421 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 480
 Qy 481 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 540
 Db 481 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 540
 Qy 541 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 600
 Db 541 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 600
 Qy 601 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 660
 Db 601 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 660
 Qy 661 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 720
 Db 661 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 720
 Qy 721 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 780
 Db 721 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 780
 Qy 781 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 840
 Db 781 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 840
 Qy 841 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 900
 Db 841 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 900
 Qy 901 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 960
 Db 901 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 960
 Qy 961 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1020
 Db 961 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1020
 Qy 1021 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1080
 Db 1021 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1080
 Qy 1081 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1140
 Db 1081 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1140
 Qy 1141 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1200
 Db 1141 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1200
 Qy 1201 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1260
 Db 1201 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1260
 Qy 1261 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1320
 Db 1261 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1320
 Qy 1321 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1380
 Db 1321 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1380
 Qy 1381 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1439
 Db 1381 GTTGGCAAAAGCAGAGGCGCGCTCCCAAAACCCCATGTGTACATTAAGTTGCGC 1439
 RESULT 3
 ABX77619

Wed Aug 13 15:18:49 2003

us-09-818-143-6.rng

Page 4

ID	ABX77619 standard; cDNA; 1439 BP.
XX	
AC	ABX77619;
XX	
DT	09-APR-2003 (first entry)
XX	
DE	Differentially expressed breast cancer associated cDNA #114.
XX	
KM	Breast cancer; differential gene expression; BC-cDNA;
KM	breast cancer diagnosis; breast cancer monitoring;
KM	breast cancer treatment; breast cancer staging; gene, ss.
XX	
OS	Homo sapiens.
XX	
FN	US2002156263-A1.
XX	
PD	24-OCT-2002.
XX	
--	04-OCT-2001; 2001US-0974298.

05-OCT-2000; 2000US-238331P.
(CHEN/) CHEN H.
Chen H;
WPI; 2003-182653/18.

new CD44s, which are differentially expressed in (metastatic) breast cancer useful for diagnosing or staging, breast cancer, or for monitoring the treatment of breast cancer in an individual -

The invention describes a combination of cDNAs (designated BC-cDNAs), which are differentially expressed in breast cancer. The combination includes 152 cDNA sequences, or their complements. The protein encoded by any of these BC-cDNAs is useful for screening several molecules or compounds to identify at least one ligand that specifically binds the protein, producing or preparing polyclonal or monoclonal antibodies, or purifying antibodies from a sample. The antibodies, which specifically bind the protein differentially expressed in breast cancer is useful for detecting the expression of a protein in a sample. The BC-cDNAs are also useful for diagnosing, monitoring the treatment of, or screening breast cancer. This sequence represents a differentially expressed breast cancer associated cDNA.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from the US patent office at seqdata.uspto.gov/sequence.html?DocId=20020156263.

Sequence 1439 BP; 392 A; 336 C; 338 G; 373 T; 0 other;

Query Match	100.0%	Score 1439	DB 25	Length 1439
Best Local Similarity	100.0%	Pred. No. 0		
Matches 1439, Conservative	0	Mismatches	0	Indels 0; Gaps 0

QY	1	GAGTATCCCTTGTTTAATCACTTTGTGTGTTAAAGAGACTTTGGTCACTGCTCA	60
Db	1	GAGTATCCCTTGTTTAATCACTTTGTGTGTTAAAGAGACTTTGGTCACTGCTCA	60
QY	61	TTCTCTGAAGAGTTTAAAGCCCTGGCTCACTTTTCACTATTTCTTCTCTCTGCTCAAGAA	120
Db	61	TTCTCTGAAGAGTTTAAAGCCCTGGCTCACTTTTCACTATTTCTTCTCTGCTCAAGAA	120
QY	121	AGAGAGAAAAAGAGCAATTACCCAGAAACCTCTTCCCTCCACATGAGAGCTTTGG	180
Db	121	AGAGAGAAAAAGAGCAATTACCCAGAAACCTCTTCCCTCCACATGAGAGCTTTGG	180
QY	181	CAATGTTAATTTTCTAGAAAAATCCTTCAACCTGAGAGAGGAAAAAGAAATCTGGCT	240
Db	181	CAATGTTAATTTTCTAGAAAAATCCTTCAACCTGAGAGAGGAAAAAGAAATCTGGCT	240

QY	241	CTCAGGATGAGCTCTGAGCTCCCGCGCCAGGCGCCAGCTTATGTCACAGGGCCGTCTT	300
Db	241	CTCAGGATGAGCTTCTGAGCTCCCGCGCCAGGCGCCAGCTTATGTCACAGGGCCGTCTT	300
QY	301	GTTCCTCCCGGGACTCAGATTTCTCTCTCAAGGAAAGAAAACAGGGCATGCTT	360
Db	301	GTTCCTCCCGGGAATCAGATTTCTCTCTCAAGGAAAGAAAACAGGGCATGCTT	360
QY	361	GTTGGCAAAACAGAGGCGCGCTCCCAAAAAACCCATGTGTACATTTAAAGTTGGCC	420
Db	361	GTTGGCAAAACAGAGGCGCGCTCCCAAAAAACCCATGTGTACATTTAAAGTTGGCC	420
QY	421	GTCGCCAGGCGCTCCAGGGAACCTTAAAGAACAGGGCTTTGCTAAACCAACATGG	480
Db	421	GTCGCCAGGCGCTCCAGGGAACCTTAAAGAACAGGGCTTTGCTAAACCAACATGG	480
QY	481	GCCAGCTGGGCTTTTAAACAACCTAGACCTTCCGAGCTGCTGAAACAGAGCTGCG	540
Db	481	GCCAGCTGGGCTTTTAAACAACCTAGACCTTCCGAGCTGCTGAAACAGAGCTGCG	540
QY	541	GGAAACGAGGCGCTCCAGAGACACTCACAAGTTCCCTCAAGGCTGTTTGGTCCCTTA	600
Db	541	GGAAACGAGGCGCTCCAGAGACACTCACAAGTTCCCTCAAGGCTGTTTGGTCCCTTA	600
QY	601	GAACTCCCAACTATGTCTTTCTTGTGCGCTTTCTCTGGTAGCAACGAAGGGAAG	660
Db	601	GAACTCCCAACTATGTCTTTCTTGTGCGCTTTCTCTGGTAGCAACGAAGGGAAG	660
QY	661	GTTCCAGCCTCTAAATAATGTGCTTGTGTACAGAGTGGCTCCAAACCAATATCGCG	720
Db	661	GTTCCAGCCTCTAAATAATGTGCTTGTGTACAGAGTGGCTCCAAACCAATATCGCG	720
QY	721	GCTGCGCTTTGAGAGCCAGTAGAGCTCAGCGCTCAAGGCTTTAAGCACTTTAGAGAG	780
Db	721	GCTGCGCTTTGAGAGCCAGTAGAGCTCAGCGCTCAAGGCTTTAAGCACTTTAGAGAG	780
QY	781	AGAAAGCGCTAGAGGCTCCGAGGTTCACTTAAAGAGCAAGCACTGGTTCTCTCTTA	840
Db	781	AGAAAGCGCTAGAGGCTCCGAGGTTCACTTAAAGAGCAAGCACTGGTTCTCTCTTA	840
QY	841	GAAAAGTAGGTTCTTGGCTGATGTAGACTGCGCTTGTGATTTTATAGTAAGGGAAT	900
Db	841	GAAAAGTAGGTTCTTGGCTGATGTAGACTGCGCTTGTGATTTTATAGTAAGGGAAT	900
QY	901	GTAAGCTAAACAAAATAGGGCTTGGCTGTCCAAAGAACAGACAGATGATAGTGA	960
Db	901	GTAAGCTAAACAAAATAGGGCTTGGCTGTCCAAAGAACAGATGATAGTGA	960
QY	961	TGAGTAGATGATGTATGTAGATGAATAGATAGATGATGATGATGATTAATTGCAGAAA	1020
Db	961	TGAGTAGATGATGTATGTAGATGAATAGATAGATGATGATGATGATTAATTGCAGAAA	1020
QY	1021	ACAAAACCAAAGCTGATGAAACAACTTAATATGGGAGTGTCTGAGGGGGAAGGTCCAGC	1080
Db	1021	ACAAAACCAAAGCTGATGAAACAACTTAATATGGGAGTGTCTGAGGGGGAAGGTCCAGC	1080
QY	1081	TTTGGGAGGCTTTGABAAGCGGTACAGAAGTCTGTGCTGTGTCTCAAGCCTTGAGGCT	1140
Db	1081	TTTGGGAGGCTTTGABAAGCGGTACAGAAGTCTGTGCTGTGTCTCAAGCCTTGAGGCT	1140
QY	1141	AGCCAGTGCACTTATTTAAGCTCTTAAAGCACTCTTGAGCCCAAGAAATGCGTACCC	1200
Db	1141	AGCCAGTGCACTTATTTAAGCTCTTAAAGCACTCTTGAGCCCAAGAAATGCGTACCC	1200
QY	1201	CTGAGATGAGGCTCAGCACTCTCTCAACACTTCTCTCCGTTGGGAATACGACCTCGG	1260
Db	1201	CTGAGATGAGGCTCAGCACTCTCTCAACACTTCTCTCCGTTGGGAATACGACCTCGG	1260
QY	1261	CCTCGGCGCCAAATCTCTTCTCAGCACTATTCATCACTTTCTGTATCAC	1320
Db	1261	CCTCGGCGCCAAATCTCTTCTCAGCACTATTCATCACTTTCTGTATCAC	1320
QY	1321	GATAGCTCAATAAGCAGATTAACACTTAATGAAGATATCTTTTGTATCGATTTT	1380

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OW nucleic - nucleic search, using sw model

Run on: August 13, 2003, 04:30:47, Search time 5268.5 Seconds
(without alignments)

11173.755 Million cell updates/sec

Title: US-09-818-143-6

Perfect score: 1439
Sequence: 1 gagctccctctgttaatca.....agaaaaaaaaaaaaa 1439

Scoring table: IDENTITY NUC
Gapop 10.0, Gapext 1.0

Searched: 2888711 seqs, 20454813386 residues

1 number of hits satisfying chosen parameters: 5777422

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database: GenEmbl.*
1: gb_da.*
2: gb_hcg.*
3: gb_in.*
4: gb_cm.*
5: gb_ov.*
6: gb_pat.*
7: gb_ph.*
8: gb_pl.*
9: gb_pr.*
10: gb_ro.*
11: gb_sbs.*
12: gb_sy.*
13: gb_un.*
14: gb_vl.*
15: em_da.*
16: em_fun.*
17: em_hum.*
18: em_in.*
19: em_mu.*
20: em_om.*
21: em_or.*
22: em_ov.*
23: em_pat.*
24: em_ph.*
25: em_pl.*
26: em_ro.*
27: em_sbs.*
28: em_un.*
29: em_vl.*
30: em_hcg_hum.*
31: em_hcg_inv.*
32: em_hcg_other.*
33: em_hcg_mus.*
34: em_hcg_pln.*
35: em_hcg_rdi.*
36: em_hcg_mam.*
37: em_hcg_vrt.*
38: em_gv.*
39: em_hlgo_hum.*
40: em_hlgo_mus.*
41: em_hlgo_other.*

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1114.8	91.4	1557	BC030030	BC030030 Homo sapi
2	1111.4	91.1	2017	BC049201	BC049201 Homo sapi
3	1283.6	89.2	128618	AC011485	AC011485 Homo sapi
4	1264	87.8	4772	AR220892	AR220892 Sequence
5	1263.6	87.8	5370	AB040951	AB040951 Homo sapi
6	1259.2	87.5	1943	HSMB01004	AL117499 Homo sapi
7	706.2	49.1	219026	AC144655	AC144655 Callicebu
8	629.8	43.8	633	AX440306	AX440306 Sequence
9	370.4	25.7	397	BD058661	BD058661 Secreted
10	300.4	20.9	309	AX330093	AX330093 Sequence
11	300.4	20.9	309	AX334468	AX334468 Sequence
12	165.8	11.5	620	CFRA11544	AJ411544 Canis fam
13	115.4	8.0	89328	AX329823	AX329823 Sequence
14	115.4	8.0	89328	HSJ98C22	293784 Human DNA s
15	86.2	6.0	215105	AC073717	AC073717 Mus muscu
16	78	5.4	220731	AC097166	AC097166 Rattus no
17	78	5.4	220731	AC134186	AC134186 Rattus no
18	78	5.4	325888	AC119556	AC119556 Rattus no
19	61.6	4.3	203058	AL844150	AL844150 Zebrafish
20	61.2	4.3	197200	EX005260	EX005260 Dario rer
21	60.6	4.2	7218	166494	166494 Sequence 14
22	59.4	4.1	186752	AC019274	AC019274 Homo sapi
23	58.4	4.1	112270	AC093332	AC093332 Homo sapi
24	58.4	4.1	179844	AP002501	AP002501 Homo sapi
25	58.4	4.1	187465	AC090209	AC090209 Homo sapi
26	58.4	4.1	204623	AP001338	AP001338 Homo sapi
27	57.6	4.0	125020	AF429315	AF429315 Homo sapi
28	57	4.0	254127	AC132482	AC132482 Mus muscu
29	56.8	3.9	203817	EX248239	EX248239 Dario rer
30	56.6	3.9	63459	AC021210	AC021210 Homo sapi
31	56.6	3.9	81078	AC023588	AC023588 Homo sapi
32	56.6	3.9	185531	EX470204	EX470204 Dario rer
33	56.6	3.9	199030	AC111324	AC111324 Rattus no
34	56.6	3.9	258571	AC097144	AC097144 Rattus no
35	56.4	3.9	103019	AC091292	AC091292 Takifugu
36	56.4	3.9	154262	AC127629	AC127629 Rattus no
37	56.4	3.9	172174	AC127629	AC127629 Rattus no
38	56.4	3.9	210483	AC111508	AC111508 Rattus no
39	56	3.9	155361	AC142174	AC142174 Rattus no
40	55.8	3.9	118721	AC093655	AC093655 Homo sapi
41	55.8	3.9	168893	EX530090	EX530090 Mus muscu
42	55.8	3.9	208360	AC020708	AC020708 Homo sapi
43	55.8	3.9	218868	AL929073	AL929073 Mus muscu
44	55.8	3.9	234288	AL772311	AL772311 Mus muscu
45	55.8	3.9	246337	AC106464	AC106464 Rattus no

ALIGNMENTS

RESULT 1
BC030030
LOCUS BC030030 1557 bp mRNA linear PRI 20-MAY-2002
DEFINITION Homo sapiens, DKFPP434N161 protein, clone MGC:3507 IMAGE:3605290,
mRNA, complete cde.
ACCESSION BC030030
VERSION BC030030.1 GI:20987193
KEYWORDS MGC.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 1557)
AUTHORS Strauberg,R.
TITLE Direct Submission

